

WHAT IS CLAIMED IS:

1. A vehicle control apparatus comprising:

a driven device that is driven by power from a drive power source;

a system that controls rotating and stopping of the drive power source based
5 on a predetermined condition;

a detector that detects a request to stop the drive power source; and

a controller that determines that the system is in a state where the system is not
allowed to stop the drive power source, and that controls the driven device so as to reduce a
load on the drive power source if the detector detects the request to stop the drive power
10 source and the controller determines that the system is in the state where the system is not
allowed to stop the drive power source.

2. A vehicle control apparatus according to claim 1, wherein the driven device
includes a power transfer device that transfers the power from the drive power source to a
wheel of the vehicle.

3. A vehicle control apparatus according to claim 2, wherein the controller
15 reduces the load on the drive power source by controlling a torque capacity between rotating
members of the power transfer device.

4. A vehicle control apparatus according to claim 3, wherein:
the rotating members include a first rotating member to which the power is
20 input from the drive power source, and a second rotating member that transfers the power
from the first rotating member to the wheel, and
the power transfer device includes a fluidic torque transfer coupling that
transfers a torque from the first rotating member to the second rotating member using a fluid.

5. A vehicle control apparatus according to claim 3, wherein:
25 the rotating members include a first rotating member to which the power is
input from the drive power source, and a second rotating member that transfers the power
from the first rotating member to the wheel,

the power transfer device transfers a torque from the first rotating member to
the second rotating member using a friction force, and

30 the controller reduces the load on the drive power source by controlling the
friction force between the first rotating member and the second rotating member.

6. A vehicle control apparatus according to claim 1, wherein the state where the
system is not allowed to stop the drive power source includes at least one of a failed state of
the system and an abnormal state of the system.

7. A vehicle control apparatus according to claim 1, wherein the state where the system is not allowed to stop the drive power source includes a state where there is no request for driving the vehicle by utilizing driving force from the drive power source and there is a request for operating the drive power source from a system other than an economy run system.

8. A vehicle control apparatus according to claim 7, wherein the driven device has an accessory that does not transfer the power from the drive power source to a wheel of the vehicle.

9. A vehicle control apparatus according to claim 8, wherein the controller determines whether there is a drive request for the drive power source from the accessory, and

the state where there is no request for driving the vehicle by utilizing driving force from the drive power source and there is the request for operating the drive power source from the system other than the economy run system includes a state where the drive request for the drive power source from the accessory is present.

10. A vehicle control apparatus comprising:
a driven device that is driven by power from a drive power source;
a system that controls rotating and stopping of the drive power source based on a predetermined condition;
a detector that detects a request to stop the drive power source; and
a controller that determines that the system is in a state where the system is allowed to stop the drive power source, and that controls the driven device so as to reduce a load on the drive power source if the detector detects the request to stop the drive power source and the controller determines that the system is not in the state where the system is allowed to stop the drive power source.

11. A vehicle control method for a vehicle having a drive power source, a driven device that is driven by power transferred from the drive power source, and a system that selectively runs and stops the drive power source, comprising:

detecting a request to stop the drive power source;
determining whether the system is in a state where the drive power source is not allowed to be stopped; and
controlling the driven device so as to reduce a load on the drive power source if the request to stop the drive power source is detected and it is determined that the system is in the state where the drive power source is not allowed to be stopped.

12. A vehicle control method according to claim 11, wherein:
the driven device includes a power transfer device that transfers the power
from the drive power source to a wheel, and
the load on the drive power source is reduced by controlling a torque capacity
5 between rotating members of the power transfer device.

13. A vehicle control method according to claim 12, wherein:
the rotating members include a first rotating member to which the power is
input from the drive power source, and a second rotating member that transfers the power
from the first rotating member to the wheel, and
10 the power transfer device transfers a torque from the first rotating member to
the second rotating member using a fluid.

14. A vehicle control method according to claim 12, wherein:
the rotating members include a first rotating member to which the power is
input from the drive power source, and a second rotating member that transfers the power
15 from the first rotating member to the wheel,
the power transfer device transfers a torque from the first rotating member to
the second rotating member using a friction force, and
the load on the drive power source is reduced by controlling the friction force
between the first rotating member and the second rotating member.

20 15. A vehicle control method according to claim 11, wherein the state where the
drive power source is not allowed to be stopped includes at least one of a failed state of the
system and an abnormal state of the system.

16. A vehicle control method according to claim 11, wherein the state where the
system is not allowed to stop the drive power source includes a state where there is no request
25 for driving the vehicle by utilizing driving force from the drive power source and there is a
request for operating the drive power source from a system other than an economy run
system.

17. A vehicle control method according to claim 16, wherein:
the driven device has an accessory that does not transfer the power from the
30 drive power source to a wheel of the vehicle,
the vehicle control method further comprises determining whether there is a
drive request for the drive power source from the accessory, and
the state where there is no request for driving the vehicle by utilizing driving
force from the drive power source and there is the request for operating the drive power

source from the system other than the economy run system includes a state where the drive request for the drive power source from the accessory is present.

18. A vehicle control method for a vehicle having a drive power source, a driven device that is driven by power transferred from the drive power source, and a system that

5 selectively runs and stops the drive power source, comprising:

detecting a request to stop the drive power source;

determining whether the system is in a state where the drive power source is allowed to be stopped; and

controlling the driven device so as to reduce a load on the drive power source

10 if the request to stop the drive power source is detected and it is determined that the system is not in the state where the drive power source is allowed to be stopped.

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